

11/05/05

10/531834
JC12 Rec'd PCT/PCT 18 APR 2005
PCT/BR2003/000149CLOTHES PINField of the Invention

The present invention relates to a fastener for multiple use, particularly used for the clothes drying.

5 Description of Related Art

There are some types of clothespins in the market that vary in material and color in accordance with the following basic structure: three pieces, two mirrored halves made of plastic or wood connected by a third piece, that would be a 10 mechanism of metal spring.

Nonetheless, some drawbacks may be attributed to the current clothespins. The fact of these fasteners are composed by three independent pieces hinders the manufacture and the associated costs thereof.

15 In addition, other inconveniences of the current fasteners consist in:

i) the easy oxidation of the metal springs, that often stains the clothes;

20 ii) the fact that they are not appropriate for holding delicate clothes; and

iii) the inconceivable facility of breaking thereof.

Summary of the Invention

It is an object of the present invention to provide an item fastener, preferably of clothes, with multiple use,

which is of simple manufacture and inexpensive, that does not destroy the clothes, and that makes possible to optimize the space available at most, presenting high mechanical resistance.

5 This object is attained by a fastener which is made in a single piece and comprises a central body, from where derive at least two lateral projections that extend in opposite directions, displaced outside and present internal grooves.

10 Preferably, the fastener of the invention presents longitudinal symmetry, and is used for holding clothes by pressure and, simultaneously, for hanging delicate clothes and/or clothes provided with shoulder straps.

15 According to the invention, the fastener is absolutely innovative with regard to its shape and use. It is manufactured in a single piece, preferably by thermoplastic injection, which substantially reduces the manufacture cost thereof and provides the fastener with incredible durability.

20 The symmetrical shape of the clothespin allows its multiple use, holding the clothes by pressure, for example, in a clothesline, and at the same time, serving as hook for hanging other pieces of clothes, or lighter items, optimizing thereby the available space at most. The use of

a flexible material piece makes possible to the fastener the exclusion of any type of mechanism to open and close, such as, for example, the conventionally used fastener's spring.

5 In accordance with the invention, another advantage of the fastener is its fine thickness, which allows a better storage, facilitating the wrapping and packing.

Brief Description of the Drawings

The invention will be described below in full detail, 10 by the way of example, on the basis of the appended drawings. The figures show:

Figure 1 - a frontal view of a preferred embodiment of the object of the present invention;

Figure 2 - a perspective view; and

15 Figure 3 - illustrates the fastener in use, exemplified in a clothesline.

Detailed Description of the Invention

Figure 1 illustrates the fastener 1 comprising a single piece, which can be made of polymeric material by 20 injection (thermoplastic), wood, non-corrosive metals and other flexible materials. The fastener is provided with a central body 2 and at least two opposite projections 3A, 3B, lightly drawn outside and in the shape of hook so that when the first projection 3A fastens by stressing the item

in a certain support, for example, a clothesline, the second projection 3B necessarily turns upward, acting as a hook capable of bearing additional items, optimizing thereby the available physical space.

5 These projections 3A, 3B have internal grooves 4, that allow the internal item expansion. These grooves 4 can vary according to the thickness and weight of the item to be fastened or supported. In view of structural subjects, these grooves 4 contain round parts 5, with the final 10 shape lightly oval in order to increase the resistance and to eliminate eventual cracks caused by the lateral stressing between the projections 3A, 3B and the central body 2.

In conformity to the present invention, Figure 2 15 illustrates a perspective view of the fastener, in which the reduced thickness 6 of the fastener can be verified, resulting in saving material, without causing inefficiency in utilization thereof or structure breaking. For the flexible materials here described, the thickness 6 can 20 vary, for instance, in the range of 1 mm to 5 mm. For polymeric materials, this thickness can preferably be of 3 mm.

Figure 3 shows an example of the fastener use in accordance with present invention. The holding is carried

out in a support, for example, a clothesline 7, in which one of the fastener's projections exert a pressure that hold the clothes 8 due to the material flexibility, while the other projection provides, at the time time, a hook for 5 satisfactory support of other lighter items 9.

Beyond the previously presented embodiment, the same inventive concept can be applied to others alternatives or possibilities. For example, the fastener will also be able to have others structural variations that allow more 10 projections to exercise the hook function in the present invention.

Thereby, it will be understood that the present invention should be interpreted in a wide way, and that its scope is determined by the terms of the appended claims.